

CLAIM OR CLAIMS

1. A method of altering a pile fabric having a multitude of projecting fibers of a given length, the method comprising:

- (a) illuminating the pile fabric at spaced areas in a stochastic image pattern to shorten the fibers within the area of illumination; and
- (b) maintaining the given length of fibers adjacent the illuminated area.

2. The method of Claim 1, further comprising providing the spaced areas at a distance selected to maintain a hand of the pile fabric.

3. The method of Claim 1, further comprising shortening substantially all the fibers within an illuminated area.

4. The method of Claim 1, further comprising illuminating the spaced areas by a circular pattern.

5. The method of Claim 1, further comprising illuminating at least 25 areas per inch.

6. The method of Claim 1, further comprising substantially eliminating the fibers within an illuminated area.

7. The method of Claim 1, wherein illuminating the pile fabric includes illuminating one of a polyester fiber, a napped fiber, a flocked fiber, a fleece fiber, or a corduroy wale.

8. A method of imparting a contour to a given region of a pile fabric, the pile fabric having a multitude of projecting fibers of an original height, the method comprising:

- (a) illuminating the given region at a plurality of spaced illuminating areas in a dithered image with a laser to shorten the fibers within the illuminated areas, each illuminated area being less than 1000 microns, and maintaining original fiber height in a non-illuminated area.

9. The method of Claim 8, further comprising selecting an energy density within the illuminated area to melt a length of the fibers within the illuminated area.

10. The method of Claim 8, further comprising selecting an energy density, illumination area and duration to shorten the fibers within the illuminated area.

11. The method of Claim 8, further comprising substantially removing the fibers within the illuminated area.

12. An apparatus for modifying a pile fabric having a multitude of fibers with a given fiber length, comprising:

(a) a support surface for retaining a portion of the pile fabric;

(b) a laser; and

(c) a controller connected to the laser to illuminate spaced areas of the pile fabric on the support surface with the illuminated area in a dithered image to shorten the fibers within the illuminated area and maintain the given fiber length within non-illuminated areas.

13. The apparatus of Claim 12, wherein the controller is selected to locate the spaced areas a distance to produce a visually perceptible reduced height of the pile fabric and maintain a hand of the pile fabric.

14. A method of transforming a dyed polyester pile fabric, comprising:

(a) illuminating the pile fabric at spaced illumination areas to shorten the fibers within the illumination area and redistribute the dye within the polyester; and

(b) allowing the polyester to solidify and exhibit a redistributed dye within the polyester.

15. A pile fabric having a multitude of projecting fibers, comprising:

(a) a plurality of spaced treated areas in a stochastic pattern within a region of the fabric, each treated area having a reduced fiber length.

16. The pile fabric of Claim 15, wherein the fibers are removed in the treated areas.

17. A method of laser treating of a fleece, comprising:

(a) illuminating spaced areas in a stochastic pattern to reduce a fiber height within the illuminated area; and

(b) spacing the illuminated area a sufficient distance to preserve the hand of the fleece.

18. A method of laser treating of a corduroy, comprising:

(a) illuminating spaced areas in a stochastic pattern to reduce a fiber height within the illuminated area; and

(b) spacing the illuminated area a sufficient distance to preserve the hand of the corduroy.